

IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-6 (canceled).

7. (new) Pressing cylinder for use in a refuse compressor for compression of refuse, the pressing cylinder being oriented vertically and coupled at a bottom portion to a pressing plate and at a top portion to a top plate fixed in a frame, comprising:

means to activate the pressing plate in upward and downward directions of the pressing cylinder:

a plurality of cylinder sections comprising a first and lowest cylinder section, which is fixed at a bottom portion to the pressing plate, a second and intermediate section which is displaceable telescopically in a longitudinal direction in the first cylinder section, and a third and upper cylinder section, which at a top portion is attached to the top plate and which is displaceable telescopically in the second cylinder section,

the third cylinder section at a bottom portion comprising a bottom plate which together with the third cylinder section and the top member delimits a closed hollow space in the third cylinder section,

an approximately cylinder-shaped bendable diaphragm disposed internally within the pressing cylinder between a bottom of the bottom plate and a bottom of the first cylinder section at the pressing plate, an airtight space being created internally in the pressing cylinder between the bottom plate, the pressing plate and the diaphragm,

the bottom plate comprising an inlet opening for a supplying a compression medium to the airtight space,

means for supplying the compression medium comprising a pipe connected at one end to the inlet opening and at an opposite end to a three-way valve, which in a first position opens to a source of the compression medium, and in a second position opens the airspace to the atmosphere, and

an extension spring clamped in the pressing cylinder between the bottom plate and the pressing plate, which extension spring contracts the cylinder sections at the end of a working stroke.

8. (new) Pressing cylinder according to claim 7, additionally comprising a compressor connected to the three-way valve to supply compressed air as the compression medium.

9. (new) Pressing cylinder according to claim 7, wherein the diaphragm is a rubber diaphragm.

10. (new) Pressing cylinder according to claim 7, wherein the first and the second cylinder sections at top portions thereof comprise a short cylinder-shaped segment having an inner and outer diameter smaller than those of the cylinder sections, creating an internally circular ring-shaped collar which co-operates with an outwardly directed circumferential edge at the bottom portions of, respectively, the second and the third cylinder sections, when the pressing cylinder is in an extended position.

11. (new) Pressing cylinder according to claim 10, wherein the cylinder-shaped segments internally comprise at least one guiding edge, which is oriented in a direction of a carrier in the segment, and an external side of the cylinder sections comprise grooves which are oriented in a direction of a carrier, and have a cross section constructed and arranged to co-operate with the guiding edges.

12. (new) Pressing cylinder according to claim 7, wherein the diaphragm is attached to the bottom plate by secure

clamping between a circumferential oblique surface on an under side of a bottom edge of the third cylinder section and a clamping ring, accommodated in a depression in the bottom plate, and is attached to the pressing plate by secure clamping between an internal oblique surface at a lower end of the first cylinder section and a clamping plate mounted on an upper side of the pressing plate.

13. (new) Pressing cylinder according to claim 12, wherein the diaphragm is fixed to a lower end of the second cylinder section by a clamping ring which is engaged in a circumferential groove internally in the second cylinder section.

14. (new) Pressing cylinder according to claim 7, wherein the extension spring comprises two concentric springs with oppositely directed pitches, forming a double spring.

15. (new) Pressing cylinder according to claim 12, wherein the bottom plate at a middle portion is drawn up into a raised part shaped as a truncated cone with a planar top surface and an internal hollow space, which can accommodate the extension spring when the pressing cylinder is in a compressed state,

a clamping member being provided at a bottom of the planar top surface and on a top side of the clamping plate for attachment of two ends of the extension spring.